

AMENDMENTS TO THE CLAIMS:

1-54. (Canceled)

55. (Currently amended) A ~~An~~ *in-vitro* process for making hybrid yeast cells with recombined DNA sequences, ~~said process~~ comprising:

(a) mutating *in-vitro* a first set of haploid yeast cells to render defective the enzymatic mismatch repair system of ~~said~~ the first set of cells and introducing a first DNA sequence into ~~said the first set of~~ cells;

(b) mutating *in-vitro* a second set of haploid yeast cells to render defective the enzymatic mismatch repair system of ~~said~~ the second set of cells and introducing a second DNA sequence into ~~said the second set of~~ cells wherein the second DNA sequence is partially homologous to the first DNA sequence and has up to 30% base mismatches with the first DNA sequence;

(c) mixing the first and second sets of cells to form diploid yeast cells;

(d) culturing ~~said the~~ diploid yeast cells to effect ~~meiotic recombination~~ meiosis of ~~said the~~ partially homologous first and second DNA sequences, to make hybrid yeast cells; and

(e) recovering ~~said the~~ hybrid yeast cells with recombined DNA sequences.

56. (Canceled)

57. (Currently amended) A ~~An~~ *in-vitro* process for obtaining hybrid DNA sequences; ~~which comprises~~ comprising:

(a) conducting the process according to claim 55 to make hybrid yeast cells; and

(b) isolating hybrid DNA sequences of ~~said the~~ hybrid yeast cells.

58. (Currently amended) The process according to claim 57, wherein ~~said the~~ hybrid DNA sequences comprise a gene.

59. (Currently amended) ~~A~~ ~~An *in-vitro*~~ process for obtaining proteins encoded by hybrid DNA sequences comprising:

- (a) obtaining ~~said~~ the hybrid DNA sequences according to the process of claim 57;
- and
- (b) expressing proteins encoded by ~~said~~ the hybrid DNA sequences.

60. (Currently amended) The process according to claim 59, wherein ~~said~~ the hybrid DNA sequences comprise a gene.

61-63. (Canceled)